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VIA ELECTRONIC FILING

Chairman Julius Genachowski
Commissioner Robert M. McDowell
Commissioner Mignon Clyburn
Commissioner Jessica Rosenworcel
Commissioner Ajit Pai
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Ex Parte Presentation

WT Docket No. 12-269
Policies Regarding Mobile Spectrum Holdings

Dear Chairman Genachowski and Commissioners McDowell, Clyburn, Rosenworcel, and Pai:

T-Mobile US, Inc. ("T-Mobile") hereby submits this letter to address the inaccurate and misleading statements made by AT&T Inc. ("AT&T") in its response to the recently filed *ex parte* submission of the United States Department of Justice ("DOJ" or "the Department") in the above-referenced proceeding.[1/] DOJ's submission correctly explains that well-defined, competition-focused rules for the upcoming spectrum auctions will best serve the American consumer by satisfying the dual goals of putting spectrum to use quickly and promoting consumer welfare in wireless markets.[2/]

No party, not even AT&T, asserts that there should be no limits on spectrum aggregation, either generally or in the incentive auction in particular; the only dispute is about the means by which the Commission should engage in that process.[3/] AT&T would prefer a spectrum screen that is

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1/ *See* Letter from Wayne Watts, Sr. Executive Vice President and General Counsel, AT&T Inc., to Chairman Genachowski, *et al.*, WT Docket No. 12-269 (filed April 24, 2013) ("AT&T Letter"); *Ex Parte* Submission of the United States Department of Justice, WT Docket No. 12-269 (filed April 11, 2013) ("DOJ Submission").

2/ *See* DOJ Submission at 1.

3/ *See* AT&T Letter at 10 (proposing a safe harbor spectrum screen with post-auction review of transactions that exceed the screen); *see also* Comments of AT&T Inc., WT Docket No. 12-269 (filed Nov. 28, 2012).

applied post-auction and that lumps all spectrum together, no matter what band it is in. By contrast, the Department endorses a spectrum cap that is applied pre-auction and that recognizes the unique value of below 1 GHz spectrum and the highly concentrated holdings of spectrum in that frequency range. The Department's proposals are designed to ensure the wireless marketplace remains competitive and that all carriers have an opportunity to access spectrum – the most critical input to wireless competition. DOJ does not, as AT&T misleadingly charges, suggest that the FCC "rig" the upcoming 600 MHz incentive auction or "tailor" its spectrum aggregation rules to favor, among others, T-Mobile. Far from urging that the FCC adopt rules that will "help specific companies," DOJ recommends that the Commission consider rules that will benefit the American public by ensuring a competitive wireless communications marketplace. For the same reasons, T-Mobile has proposed that the Commission adopt rules limiting any licensee from acquiring more than a certain percentage of spectrum below 1 GHz in the upcoming incentive auction. These rules would not preclude auction entry; they would merely allow all carriers to have a fair opportunity to bid on the spectrum and compete in the wireless marketplace.

AT&T is also wrong when it argues that DOJ's recommendations would reduce auction revenues, jeopardizing Spectrum Act priorities.[4/] To the contrary, the certainty and fairness of a pre-announced set of auction rules would not only encourage broader participation in the auction, it would also facilitate prospective bidders' abilities to plan their networks, services, technologies, and business models, and secure the necessary financing. Such an approach would result in increased, not decreased, auction revenues.

Low-Frequency Spectrum is Uniquely Valuable.

AT&T continues to argue against auction rules that recognize the unique value of low-frequency spectrum.[5/] As it has in this proceeding and the incentive auction rulemaking, AT&T asserts that there is no meaningful distinction between high- and low-frequency spectrum because the deployment cost savings associated with low-frequency spectrum are offset by the higher price paid for such spectrum at market. It also claims that the superior propagation of low-frequency spectrum only results in decreased build-out costs in rural areas, and that, in any case, there is no foreclosure effect in such markets because there is no indication that spectrum resources in those areas are scarce or that carriers like T-Mobile have expressed any desire to expand their footprint in rural areas.[6/] Finally, it argues that T-Mobile and Sprint Nextel Corp. ("Sprint") have somehow forfeited any claim to efficient, pro-competitive auction rules because they opted not to participate in the 700 MHz auction in 2008 and they have built out their networks using high-frequency spectrum. None of these arguments has merit.

First, as nearly all industry participants recognize and as the FCC and DOJ have confirmed, spectrum below 1 GHz is uniquely valuable for mobile broadband networks.[7/] While AT&T's

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4/ *See* AT&T Letter at 5.

5/ *See id.* at 6-9.

6/ *See id.* at 8-9.

7/ *See, e.g.*, Comments of T-Mobile USA, Inc., GN Docket No. 12-268, at 27-29 (filed Jan. 25, 2013) ("T-Mobile Incentive Auction Comments"); Comments of T-Mobile USA, Inc., WT Docket No. 12-269, at 14-

General Counsel now says otherwise, its Chairman and Chief Executive Officer Randall Stephenson has consistently underscored the especially valuable nature of this spectrum. Referring to 700 MHz spectrum when that band was auctioned, for instance, Mr. Stephenson said "It doesn't get better than this."[8/] He reiterated the point as recently as last year, observing that "one of the beauties of the latest spectrum we bought, 700 megahertz, is in areas like this it propagates like a bandit. It takes fewer cell sites to get a good quality signal, both voice and data to you."[9/] William Hogg, AT&T's Senior Vice President of Network Planning and Engineering, has also publicly touted the benefits of low-frequency spectrum.[10/]

As AT&T's Stephenson notes, spectrum below 1 GHz has favorable propagation characteristics that provide for better coverage inside buildings and across larger geographic areas, including those with challenging climates and terrain. Lower-band spectrum also provides higher spectral efficiency over a given area than higher-band spectrum, and systems operating in lower-band frequencies can deliver more received signal power to locations within a same-size cell as systems operating in higher-band spectrum.[11/] Put simply, a carrier can cover more area and

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18 (filed Nov. 28, 2012) ("T-Mobile Mobile Spectrum Holdings Comments"); DOJ Submission at 12 ("[L]ow-frequency spectrum . . . has superior propagation characteristics, permitting better coverage in both rural areas and building."); *see also* Jonathan B. Baker, "Spectrum Auction Rules That Foster Mobile Wireless Competition," at 14 (March 12, 2013) ("Baker Report"), *attached to* Letter from Howard J. Symons, Member, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 12-269 (filed March 12, 2013).

8/ Craig Matsumoto, *AT&T Parties Like It's 1999*, HEAVY READING (2007), *available at* http://www.heavyreading.com/document.asp?doc_id=140162 ("Stephenson also confirmed AT&T will bid in the 700 MHz spectrum auction, noting that this shouldn't be a surprise. . . . 'We refer to it as 'beachfront property.' It doesn't get any better than this.'"); Sam Churchill, *iPhone Going HSPA*, dailywireless.org (Nov. 29, 2007), *available at* http://www.dailywireless.org/2007/11/29/iphone-going-hspa/ ("Other remarks by CEO Stephenson: . . . On the 700 MHz auction: It is beach front property. It doesn't get any better than this. (They will be bidding.)").

9/ *Transcript: AT&T's Randall Stephenson on the Network's Strength*, CNN MONEY (July 18, 2012), *available at* http://tech.fortune.cnn.com/2012/07/18/randall-stephenson-att/; *see also AT&T's CEO Discusses Q4 2011 Results - Earnings Call Transcript*, SEEKING ALPHA (Jan. 26, 2012), *available at* http://seekingalpha.com/article/322378-at-t-s-ceo-discusses-q4-2011-results-earnings-call-transcript ("In terms of the frequencies that we're interested in, it's no surprise. We tend to favor the lower band, the 700-megahertz spectrum. We have a very, very good position in that particular location so we obviously have a lot of interest in the spectrum that resides down there. We've done a number of transactions in that particular area since the auctions occurred in 2007, so that's obviously an important area for us.").

10/ *See* Declaration of William Hogg, Senior Vice President of Network Planning and Engineering, AT&T Services, ¶ 57, *attached to* Application of AT&T Inc. and Deutsche Telekom AG for Consent to Assign or Transfer Control of License and Authorizations, ULS File No. 0004669383, *et al.* (filed Apr. 21, 2011) ("[W]e expect T-Mobile USA subscribers in certain areas will be able to benefit from having access to both networks. In these areas, access to AT&T's GSM network, including its low band 850 MHz cellular spectrum, will provide T-Mobile USA subscribers with improved coverage, including superior in-building service and coverage compared to T-Mobile USA's existing GSM network.") ("AT&T/T-Mobile Application").

11/ *See* Declaration of Dennis Roberson, WT Docket No. 12-4, at 8-9 (March 26, 2012) (noting that the reason lower-band spectrum is able to provide a higher spectral efficiency over a given area is because the better propagation characteristics of that spectrum "allow a network using low-band frequencies to deliver a higher received signal level over the cell area").

offer better in-building service using lower-band spectrum with fewer cell sites. These characteristics allow systems operating in lower-band spectrum to provide the same geographic coverage at a lower cost than higher-band spectrum. Licensees of predominantly higher-frequency spectrum must construct more cell sites in a given geographic area, requiring significantly greater initial and ongoing capital outlays and additional operating expenses, to try to match the signal coverage of a licensee deploying service using 700 MHz, 850 MHz, and now 600 MHz, band spectrum. Accordingly, in previous wireless investigations, the DOJ has typically paid careful attention to whether merging wireless carriers had a particularly strong position in low-frequency spectrum.[12/]

AT&T is wrong when it suggests that the combined spectrum and deployment costs of low-band and high-band networks are the same.[13/] Critical propagation characteristics of low-band spectrum, such as in-building penetration and efficient coverage of rural and other large geographic areas, simply cannot be effectively replicated at higher bands even if carriers are willing to make the additional investments required to deploy and operate systems in those bands. The need for more transmitters at higher bands also imposes substantial, if not insurmountable, delays and other tangible and intangible costs associated with obtaining additional siting approvals from multiple jurisdictions that licensees in lower bands can avoid.[14/]

Second, while lower-frequency spectrum is particularly useful in rural areas because of its coverage characteristics and decreased build-out costs, the need for low-frequency spectrum is not driven only by the cost savings associated with erecting fewer sites. Carriers need lower-frequency spectrum in urban areas because it penetrates buildings better than higher-frequency spectrum. Regardless of location, moreover, a mix of high- and low-frequency spectrum best enables carriers to meet different needs in a network build-out.[15/] Low- and high-frequency spectrum bands are not completely interchangeable. As former FCC Chief Economist Jonathan Baker has explained: "Low-frequency spectrum can serve the capacity function more typically associated with high-frequency spectrum. But the physical properties of high-frequency

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12/ *See* DOJ Submission at 13-14; *see also Application of AT&T Inc. and Qualcomm Incorporated for Consent to Assign Licenses and Authorizations*, Order, 26 FCC Rcd 17589, ¶ 49 (noting that it is "prudent to inquire about the potential impact of [a licensee's] aggregation of spectrum below 1 GHz" when evaluating a proposed spectrum transfer").

13/ *See* AT&T Letter at 8.

14/ AT&T itself has long acknowledged the challenge of siting new facilities: "[B]uilding new cell sites is difficult, expensive, and – most importantly – prone to multi-year delays. . . . Moreover, many municipalities face budget deficits and have fewer resources to process tower site applications even as the number of site applications has grown with the rollout of 4G services by multiple providers." AT&T/T-Mobile Application at 27, 46-47.

15/ *See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, Sixteenth Report, WT Docket No. 11-186 (Terminated), FCC 13-34, ¶ 119 (rel. March 21, 2013) ("*Competition Report*") ("[A]s a general matter, a provider is best positioned if it holds complementary spectrum bands, *i.e.*, both higher and lower frequency bands."); DOJ Submission at 12-13; *see also* Baker Report at 14-15 ("[M]obile wireless services of any given geographic coverage and quality . . . can be provided more efficiently using a mix of low and high spectrum frequencies than using either frequency exclusively.").

spectrum make it costly and less practical for wireless providers to use high-frequency spectrum to serve the coverage function more typically associated with low-frequency spectrum."[16/] The premise of AT&T's argument – that carriers can simply use whatever spectrum they have without being disadvantaged – is wrong and inconsistent with AT&T's own spectrum holdings. *All* providers should be able to make their own determinations of how to build their networks.

Finally, as should be obvious, T-Mobile's decision to forgo participation in the 700 MHz auction is irrelevant to what rules the Commission should adopt for the upcoming 600 MHz auction. The 700 MHz auction occurred more than half a decade ago, and the wireless landscape has changed significantly since then. It is more apparent than ever that all carriers need access to a mix of high- and low-band spectrum to compete effectively and that the Commission can and should adopt rules to prevent the undue concentration of holdings below 1 GHz.

In any event, T-Mobile's decision not to participate in the 700 MHz auction can only be understood in the context of the business environment at that time. When the 700 MHz spectrum was auctioned, T-Mobile had just spent $4.2 billion in the auction of AWS-1 spectrum,[17/] and was focused on the challenging and costly task of clearing that spectrum of government users to deploy 3G service. In the fall of 2007, when T-Mobile had to decide whether to participate in the 700 MHz auction, it still did not have access to the AWS-1 spectrum it had won in 2006 and would not get access to that spectrum for almost another year.

T-Mobile was also concerned that it might be difficult to win a meaningful amount of spectrum in the 700 MHz band since the two largest nationwide carriers seemed committed to taking the lion's share of the spectrum blocks out of that auction (which they did), and the FCC had no rules in place to prevent that from happening. As AT&T notes, Sprint did not participate in the 700 MHz auction either. And while T-Mobile cannot speak for Sprint, the 700 MHz auction may well be an example where the absence of any assurance from the FCC that smaller national carriers would have a fighting chance had the effect of depressing participation.

The Risk of Market Foreclosure is Real.

Contrary to AT&T's assertions,[18/] the current market concentration is especially troubling because it may lead to foreclosure activities. As DOJ explains, "the more concentrated a wireless market is, the more likely a carrier will find it profitable to acquire spectrum with the aim of raising competitors' costs . . . [which] could take the shape, for example, of pursuing spectrum in order to prevent its use by a competitor, independent of how efficiently the carrier uses the spectrum."[19/] DOJ refers to the value that providers gain by preventing rivals from accessing spectrum and improving their services as "foreclosure value," which is distinct from

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16/ Baker Report at 15.

17/ *See* FCC Report, *FCC Advanced Wireless Services Auction No. 66* (2006), *available at* http://wireless.fcc.gov/auctions/66/charts/66press_3.pdf.

18/ *See* AT&T Letter at 5-6.

19/ DOJ Submission at 10.

the revenue the providers would receive from actual use of the spectrum, or "use value," and notes that the foreclosure value of keeping spectrum out of a competitor's hands could be very high.[20/] In other words, a dominant carrier would bid a premium over and above the use value of spectrum in order to keep that spectrum from being used by a rival to "provide broader service offerings, expand coverage, or increase capacity."[21/]

Contrary to AT&T's assertions that these concerns are "unfounded" and "unsupported," the concept of "foreclosure value" is well grounded in basic economic principles. As Professor Baker has explained,[22/] when spectrum ownership is concentrated, firms with large market shares have an increased incentive and ability to obtain or maintain downstream market power by keeping spectrum away from their rivals. If the incumbent can limit competition from excluded rivals by acquiring a spectrum block at auction, the value it will place on that spectrum will include its market power benefit, and will therefore exceed the social value of the spectrum acquisition.[23/] The danger of foreclosure may eclipse the benefits that consumers might enjoy from the greater economies of scale large incumbent operators can achieve, a view held by prominent economists who have studied auction design and wireless competition.[24/] If foreclosed rivals are limited in *their* ability to achieve scale economies, the investments *they* make and the competitive constraint that *they* will impose on the large incumbent carrier will likewise be limited. This, in turn, would reduce the extent to which large incumbent carriers will feel compelled to pass along efficiency benefits to consumers in terms of lower prices, higher quality of service or new service offerings.[25/] Similarly, over the long-term, if incumbents are permitted to control large amounts of spectrum, they may be able to frustrate the development of new technologies and business models in the downstream market as well as in complementary markets.[26/] Smaller, disruptive providers provide competitive pressure in the industry and that pressure, in turn, improves the welfare of *all* consumers.[27/]

AT&T mischaracterizes the foreclosure concern as being grounded in a fear that it would bid up the price of spectrum in order to hoard or warehouse it, but that is not the point and DOJ never uses those terms. Rather, DOJ's appropriate concern is that a provider seeking to extend its dominance will outbid rivals because it is willing to pay a price that includes foreclosure value.

20/ *See id.* at 11.

21/ *Id.*

22/ *See* Baker Report at 3.

23/ *Id.* at 3-4 (internal citation omitted).

24/ *See, e.g.*, Peter Cramton, Evan Kwerel, Gregory Rosston & Andrzej Skrzypacz, *Using Spectrum Auctions to Enhance Competition in Wireless Services*, 54 J.L. & ECON. 167, 172-173 (2011) ("On one hand, the monopolist is likely to exercise market power after auction (which is inefficient); on the other hand, there may be important cost savings from not having two independent service providers. It is important to note that the inefficiency of a monopolistic provider is often not only due to the static under provision of service (which could be potentially fixed by rate regulation) but also due to lower competitive pressure to innovate, build out coverage, and develop new services.").

25/ *See* Baker Report at 4.

26/ *See id.* at 5.

27/ *See* T-Mobile Incentive Auction Comments at 35.

Rivals fully prepared to pay the "market" price for spectrum[28/] would still lose out if the dominant providers are prepared to pay supracompetitive prices for foreclosure purposes. That is particularly a risk in the 600 MHz spectrum, given the dominant position that the two largest carriers currently exercise in the valuable spectrum below 1 GHz and their understandable desire to preserve it.

Existing structures for addressing concentration such as the spectrum screen and build-out requirements would not address foreclosure concerns because they act as post-auction remedies only. They would do nothing to prevent the larger carriers from acquiring the spectrum in the first instance at auction for the purpose of preventing rivals from obtaining it. Moreover, reliance on post-auction divestitures would likely still allow the carrier to hand-pick the potential buyer or buyers that participate in the private spectrum sale.[29/] As discussed below, only *ex ante* spectrum caps can effectively limit these competitive distortions before they occur.[30/]

Spectrum Caps are Fairer and More Efficient Than Reliance on Post-Auction Divestitures.

Based on the acknowledged unique value of spectrum below 1 GHz and the substantial risk of market foreclosure, the Commission should adopt a framework for the incentive auction that includes clear, upfront rules that provide certainty for entities interested in participating. In particular, the Commission should adopt rules prohibiting any licensee from acquiring more than a certain percentage of spectrum below 1 GHz, applied on a market by market basis, *i.e.* a spectrum cap.[31/] These rules would promote long-term competition, encourage auction participation among all interested parties, and prevent the further consolidation of spectrum below 1 GHz. They would *not* preclude auction entry; they would merely provide all carriers with predictable rules of the road and a fair opportunity to bid on the spectrum.

In the context of an auction, a spectrum cap is a far superior mechanism to address spectrum aggregation than post-auction remedies such as a case-by-case review of spectrum holdings coupled with divestitures.[32/] Participating in an FCC auction is a complex, time-consuming, and expensive process, regardless of its outcome.[33/] Post-auction processes to limit excessive spectrum aggregation are burdensome and create uncertainty.[34/] To determine whether a licensee's acquisition of spectrum in secondary market transactions is in the public interest, the Commission currently must assess a variety of factors, such as population density, the number of rival service providers, the rival firms' market shares, population and land area coverage, and the

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28/ *See* AT&T Letter at 3.

29/ *See* T-Mobile Incentive Auction Comments at 30; Baker Report at 8.

30/ *See* Baker Report at 4.

31/ *See* T-Mobile Incentive Auction Comments at 27-31; T-Mobile Mobile Spectrum Holdings Comments at 10-12, 17-18.

32/ *Cf.* AT&T Letter at 10; Letter from Fred Upton, Chairman, Committee on Energy and Commerce, U.S. House of Representatives, *et al.*, to Julius Genachowski, Chairman, FCC, WT Docket No. 12-269, at 3 (filed April 19, 2013).

33/ *See* T-Mobile Mobile Spectrum Holdings Comments at 8-9.

34/ *See* Baker Report at 11-12.

availability of spectrum within the market for providers of mobile telephony and broadband services.[35/]

These considerations can be difficult and time-consuming to assess on a case-by-case basis even under the best of circumstances, but would be even more difficult to evaluate in the incentive auction proceeding where subjective questions such as the likelihood that rival service providers or potential entrants would be foreclosed from expanding or deploying their networks could arise simultaneously in markets throughout the country and implicate multiple parties. Because post-auction divestitures require Commission resources to determine if divestiture should occur, they also delay the ultimate licensing of spectrum to entities that will use it to offer services to the public. As DOJ correctly recognizes, "a case-by-case review of every acquisition by a winning bidder in a large auction could strain the agencies' resources and delay quick allocation of spectrum critical for innovation and increased competition."[36/] In contrast, a cap on the amount of spectrum below 1 GHz would avoid the administrative costs of assessing license spectrum holdings on a case-by-case basis after the auction.[37/]

Post-auction divestitures also invite uncertainty for would-be auction participants – uncertainty that may be sufficient to preclude participation as a practical matter. On the one hand, potential bidders would be unable to determine in advance if they will be able to retain the spectrum for which they are the high bidder.[38/] On the other, potential bidders may be dissuaded from participating if they cannot determine whether large carriers will be able to acquire spectrum without meaningful limitations. Such uncertainty could severely limit auction participation and revenues. As a result, in auctions without a cap, there is a risk that only the two largest carriers will show up. The result would be a less competitive auction in which those firms split the licenses among themselves at low prices.[39/] By contrast, when a spectrum cap is in place, non-incumbent and smaller carriers recognize their increased likelihood of succeeding at auction, "giving them the incentive and ability to secure the needed financing from capital markets."[40/]

Similarly, auction results may be compromised if an entity that is the high bidder for particular spectrum is later required to divest that spectrum. As Professor Baker has noted, "Absent clear auction rules, firms may base their bids on potentially erroneous predictions of how the agency will react in an after-the-fact review of auction results, distorting auction bidding and

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35/ *See Applications of AT&T Mobility Spectrum LLC, New Cingular Wireless PCS, LLC, Comcast Corporation, Horizon Wi-Com, LLC, NextWave Wireless, Inc., and San Diego Gas & Electric Company for Consent to Assign and Transfer Licenses*, Memorandum Opinion and Order, 27 FCC Rcd 16459, ¶ 34 (2012).

36/ DOJ Submission at 21-22.

37/ *See* Baker Report at 3, 8-9; DOJ Submission at 22-23.

38/ *See* Baker Report at 12 (emphasizing that the costs associated with such an outcome "are potentially substantial, as rivals that might have won in the initial auction but were outbid by the large firm (or decided not to bid because they expected to be outbid) may have found workarounds by the time the winning firm is required to divest").

39/ *See* Peter Cramton, "Lessons from the United States Spectrum Auctions," Testimony before the United States Senate Budget Committee, 3 (Feb. 10, 2000) ("Cramton Testimony").

40/ *See id.*

outcomes."[41/] Some entities may discount their bids to account for the risk that they might later bear the costs of divesting the spectrum they have won.[42/] Post-auction divestitures also allow the divesting party, not the auction process, to determine which spectrum to hold and which entities obtain the cast-offs. This is particularly troubling as the auction winner would be able to make that determination in ways that reduce potential competition to itself, further enhancing the inefficiency of the resulting spectrum allocation.[43/] Alternatively, unwinding the results of a completed auction with multiple bidders and re-running the auction to correct an excessive aggregation of spectrum would be impractical,[44/] disruptive and, under the plain language of the Spectrum Act, possibly unlawful.

The Spectrum Act Does Not Limit the FCC's Ability to Adopt Spectrum Aggregation Rules in Auctions.

AT&T claims that DOJ's recommendations are "at odds with the competitive bidding process required by the Spectrum Act" because they would exclude qualified bidders,[45/] but that assertion is incorrect and reflects a selective reading of the statute. The Spectrum Act amendments prohibit the FCC from "prevent[ing]" a person from participating in an auction, but T-Mobile does not believe, nor does DOJ propose, that even the two largest carriers should be "prevented" from bidding in the 600 MHz auction.[46/] Contrary to AT&T's assertion, moreover, upfront auction rules that apply to all participants are "rules of general applicability . . . concerning spectrum aggregation that promote competition" and thus are specifically permitted under section 309(j)(17)(B), even if those rules affect different entities differently.[47/] Far from a "backdoor mechanism" to circumvent the statutory direction regarding auction qualifications,[48/] such rules are fully consistent with the express preservation of Commission authority to address spectrum aggregation. [49/]

41/ Baker Report at 8.

42/ *See id.* at 11.

43/ *See id.* at 8.

44/ *See id.* at 13 (noting that firms "could take advantage of the Commission's time-inconsistency by bidding for spectrum that they would be prohibited from acquiring by a spectrum cap, knowing that their anticompetitive purchases will be too costly to reverse").

45/ AT&T Letter at 4-5.

46/ AT&T suggests that the statute bars the Commission from adopting rules that prevent AT&T and Verizon from "fully participating" in the auction, *see* AT&T Letter at 4 & n.17, but the word "fully" appears nowhere in section 309(j)(17)(A).

47/ 47 U.S.C. § 309(j)(17)(B); *see, e.g.*, *PBW Stock Exchange, Inc. v. SEC*, 485 F.2d 718, 732 (3d Cir. 1973) (upholding a rule as being of general applicability because it is "of prospective application and applicable across the board, although the rule may affect each of the [stock] exchanges to differing degrees").

48/ *See* AT&T Letter at 4-5, n.17.

49/ The Spectrum Act also did not affect the Commission's obligation to design auctions in a manner that "avoid[s] excessive concentration of licenses and . . . disseminat[es] licenses among a wide variety of applicants." 47 U.S.C. § 309(j)(3)(B).

T-Mobile agrees that the FCC's auction design "should not pick winners and losers," but competition is best served if no one carrier is able to hold all or most of the limited spectrum available. Reasonable limits on spectrum aggregation will accomplish that. Promoting competition by imposing spectrum limits does not give carriers like T-Mobile any special advantage; it merely levels the playing field and allows natural market forces to operate to consumers' benefit. AT&T's characterization of clear and predictable rules as a "subsidy" to "protect competitors" misses the mark completely. Just as the Commission has enforced spectrum aggregation limits in the past to protect competition – and ultimately consumers – it may appropriately do so here.

While AT&T complains about "rigging" the auction, the *failure* to adopt reasonable rules for spectrum acquisitions would tilt the auction sharply towards AT&T. The approach that DOJ has suggested would neither "rig" the auction nor pick winners and losers. Rather, it would ensure only that all parties are subject to the same rules that promote competition in the auction and prevent excessive spectrum concentration.

Reasonable Spectrum Aggregation Rules Do Not Contravene Other Spectrum Act Goals.

AT&T is also wrong when it argues that DOJ's recommendations would reduce auction revenues, jeopardizing Spectrum Act priorities.[50/] While AT&T seems simply to assume that imposing spectrum limits would reduce auction revenues, a more careful analysis demonstrates that this is not the case.[51/] To the contrary, a limit would allow carriers to know *in advance* how much spectrum both they and their rivals could purchase in the auction. Such certainty would not only encourage broader participation in the auction, it would also facilitate prospective bidders' ability to plan their networks, services, technologies, and business models, and secure the necessary financing. In addition, a spectrum limit could potentially increase aggregate auction revenues by providing a clear signal to the marketplace that the nation's one or two largest providers will not be able to acquire all of the most valuable spectrum in the market. As Professor Baker notes, a potential auction participant "expecting to be outbid could readily be deterred from participating in the first place."[52/] Auction rules such as spectrum limits, however, would encourage entry into the auction by potentially-foreclosed rivals, which in turn would raise auction revenues, enabling the marketplace to operate and raise the revenues required to compensate broadcasters, meet the needs of the nation's first responders, and reduce the deficit.

AT&T also argues that auction restrictions that would depress revenues threaten to reduce broadcaster participation in the incentive auction, resulting in less (and potentially no) spectrum

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50/ *See* AT&T Letter at 5.

51/ It is worth noting that the Spectrum Act did not repeal long-standing law prohibiting the Commission from solely considering revenue in designing auctions, 47 U.S.C. § 309(j)(7)(B), or other provisions of the Communications Act requiring the Commission to "generally encourage the larger and more effective use of radio in the public interest," 47 U.S.C. § 303(g), and "to protect the public interest in the use of the spectrum," 47 U.S.C. § 309(j)(3). The auction design must necessarily be a careful balancing of all of the Commission's statutory obligations.

52/ Baker Report at 10-11; *see also* Cramton Testimony at 3.

cleared for mobile wireless use.[53/] The Commission's past auctions demonstrate the contrary. When the Commission imposed auction-specific caps on Personal Communications Service ("PCS") spectrum, the bidding activity (adjusted for the number of licenses available) was similar to that in the auction of AWS-1 spectrum, in which no spectrum cap was imposed, and the cap did not reduce the size of the bids.[54/] If auction restrictions could result in a failure of any broadcast spectrum to be cleared, T-Mobile certainly would not be advocating for such restrictions; that result would potentially hurt T-Mobile more than AT&T. Without cleared broadcast spectrum, AT&T could solidify its position as one of the largest two carriers in the nation. T-Mobile and other carriers need that spectrum to compete and to limit the largest carriers' ability to further dominate the market.

The FCC Has Historically Structured Auctions to Promote Competition.

The adoption of spectrum acquisition rules for the 600 MHz auction would be a natural extension of the Commission's continuing efforts to prevent the harmful concentration of spectrum holdings, a process in which it has been engaged for decades. The original cellular/PCS cross-ownership rule, for instance, was a hard *cap* that prohibited the two cellular licensees from obtaining more than 10 megahertz of broadband PCS spectrum in their cellular service areas and prohibited broadband PCS licensees from obtaining more than 40 megahertz of total spectrum allocated to broadband PCS.[55/] The Commission later replaced this rule with another cap, this time on the overall amount of commercial mobile radio service ("CMRS") spectrum that limited an entity to no more than 45 megahertz of spectrum in three radio services – broadband PCS, cellular and Specialized Mobile Radio.[56/] The Commission abandoned the spectrum cap in 2001, substituting instead a case-by-case review of individual transactions,[57/] which it now uses today along with a spectrum screen to determine if a carrier holds too much spectrum in a market.

Unfortunately, spectrum best suited for advanced mobile broadband applications – particularly spectrum below 1 GHz – has become increasingly concentrated in the hands of the nation's largest wireless carriers. The two largest providers now together hold more than 78 percent of

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53/ *See* AT&T Letter at 5.

54/ *See* T-Mobile Incentive Auction Comments at 34.

55/ *See Amendment of the Commission's Rules to Establish New Personal Communications Services*, Second Report and Order, 8 FCC Rcd 7700, ¶¶ 61, 106 (1993).

56/ *See Implementation of Sections 3(n) and 332 of the Communications Act, et al.*, Third Report and Order, 9 FCC Rcd 7988, ¶ 263 (1994). This cap was imposed in addition to the cellular/PCS cross-ownership rule, *i.e.* those caps could not be exceeded either. The cellular/PCS cross-ownership rule was eliminated in 1996, leaving the CMRS cap in place. *See Amendment of Parts 20 and 24 of the Commission's Rules; Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission's Cellular/PCS Cross-Ownership Rule*, Report and Order, 11 FCC Rcd 7824, ¶¶ 94-104 (1996). The Commission subsequently raised the cap in rural areas to 55 megahertz, but retained the 45 megahertz cap elsewhere. *See 1998 Biennial Regulatory Review Spectrum Aggregation Limits for Wireless Telecommunications Carriers, et al.*, Report and Order, 15 FCC Rcd 9219, ¶¶ 77-84 (1999).

57/ *See 2000 Biennial Regulatory Review Spectrum Aggregation Limits For Commercial Mobile Radio Services*, Report and Order, 16 FCC Rcd 22668, ¶¶ 47-58 (2001).

the spectrum below 1 GHz.[58/] DOJ even notes that this figure likely understates the carriers' current actual holdings of this valuable spectrum.[59/] AT&T's proposed band plan for 600 MHz would further extend its dominance in lower-band spectrum by effectively limiting the amount of spectrum available for auction.[60/] While T-Mobile agrees with AT&T that the Commission should work to ensure that additional wireless spectrum is available to meet the needs of all carriers, the Commission's ongoing effort to address excessive spectrum concentration through a pre-announced set of well-defined and predictable rules is timely, appropriate, and consistent with previous regulatory practices.[61/]

* * *

The last several months have been quite eventful for T-Mobile. It has now completed an important corporate merger and has recently become a publicly traded U.S. company listed on the New York Stock Exchange. T-Mobile has also made substantial changes to its business model – both in the services provided to customers, through the addition of an LTE network, and in how customers are charged for those services, by eliminating two-year contracts and device subsidies. T-Mobile firmly believes that its future success will be found in providing superior services and the best value in wireless to its customers. We hope the FCC will continue to adopt policies and principles that enable wireless providers to compete on innovation and customer service.

Respectfully submitted,

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Thomas J. Sugrue
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58/ *See Competition Report* ¶ 118, Table 17.

59/ *See* DOJ Submission at 14, n.21 ("Even this may understate the dominant position the two leading carriers hold in low-frequency spectrum given that the figure does not account for more recent transactions, and that there are interference and other concerns with a significant portion of the 700 MHz spectrum held by other carriers.").

60/ *See* Comments of AT&T Inc., GN Docket No. 12-268, at 33 (filed Jan. 25, 2013) (explaining that in markets that meet "robust channel-clearing targets" there would be only one 25-megahertz group of paired spectrum).

61/ *See* DOJ Submission at 23.